

CLAIMS

1. A gateway system relaying a request  
from a user for a service provided by another system,  
5 the gateway system characterized by comprising:

an authentication unit which receives the  
request and authenticates the user;

a service request unit which makes the  
request on behalf of the user based on a result of  
10 an authentication by said authentication unit, using  
link information and authentication information  
corresponding to the requested service; and

an information link unit which  
incorporates link information concerning the gateway  
15 system into link information included in returned  
data corresponding to the request.

2. The gateway system as claimed in claim  
1, characterized by having a plurality of systems  
20 each including said authentication unit, said  
service request unit, and said information link unit,  
the systems being provided in a hierarchical  
structure.

25 3. The gateway system as claimed in claim  
1, characterized in that:

said service request unit comprises a  
table in which accessible service information  
retained by the user is entered, and makes the  
30 request for a service on behalf of the user when the  
service is accessible to the user.

4. The gateway system as claimed in claim  
1, characterized in that:

35 said service request unit comprises a  
table in which an option ID serving as a billing  
unit is entered in correspondence to the system

providing the service, and transmits the option ID in making the request.

5           5. The gateway system as claimed in claim  
1   1, characterized in that:

          said information link unit converts the  
link information included in the returned data into  
the link information concerning the gateway system,  
the link information included in the returned data  
10 being included in control information set in the  
returned data, the control information including  
access information of the user to a WWW server.

15           6. The gateway system as claimed in claim  
2, characterized in that:

          said information link unit converts the  
link information included in the returned data into  
the link information concerning the gateway system,  
the link information included in the returned data  
20 being included in control information set in the  
returned data, the control information including  
access information of the user to a WWW server.

25           7. The gateway system as claimed in claim  
3, characterized in that:

          said information link unit converts the  
link information included in the returned data into  
the link information concerning the gateway system,  
the link information included in the returned data  
30 being included in control information set in the  
returned data, the control information including  
access information of the user to a WWW server.

35           8. The gateway system as claimed in claim  
4, characterized in that:

          said information link unit converts the  
link information included in the returned data into

the link information concerning the gateway system,  
the link information included in the returned data  
being included in control information set in the  
returned data, the control information including  
5 access information of the user to a WWW server.

9. A computer-readable recording medium  
comprising:

a program which causes a computer to  
10 execute the steps of:

(a) authenticating a user upon receiving a  
request for a service from the user;

(b) making the request on behalf of the  
user based on a result of authenticating the user,  
15 using link information and authentication  
information corresponding to the requested service;  
and

(c) incorporating link information  
concerning a gateway system into link information  
20 included in returned data corresponding to the  
request.

10. The computer-readable recording  
medium as claimed in claim 9, characterized in that:  
25 said step (b) comprises a table in which  
accessible service information retained by the user  
is entered, and makes the request for a service on  
behalf of the user when the service is accessible to  
the user.

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11. The computer-readable recording  
medium as claimed in claim 9, characterized in that:  
said step (b) comprises a table in which  
an option ID serving as a billing unit is entered in  
35 correspondence to a system providing the service,  
and transmits the option ID in making the request.

12. The computer-readable recording medium as claimed in claim 9, characterized in that:

5       said step (c) converts the link information included in the returned data into the link information concerning the gateway system, the link information included in the returned data being included in control information set in the returned data, the control information including access information of the user to a WWW server.

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13. The computer-readable recording medium as claimed in claim 10, characterized in that:

15       said step (c) converts the link information included in the returned data into the link information concerning the gateway system, the link information included in the returned data being included in control information set in the returned data, the control information including access information of the user to a WWW server.

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14. The computer-readable recording medium as claimed in claim 11, characterized in that:

25       said step (c) converts the link information included in the returned data into the link information concerning the gateway system, the link information included in the returned data being included in control information set in the returned data, the control information including access information of the user to a WWW server.

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